Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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Nuclear safeguards standards under the Treaty on the Non-Proliferation of Nuclear Weapons

Working paper submitted by the members of the Non-Proliferation and Disarmament Initiative (Australia, Canada, Chile, Germany, Japan, Mexico, Netherlands, Nigeria, Philippines, Poland, Turkey and United Arab Emirates)

1. The Non-Proliferation and Disarmament Initiative considers that effective nuclear safeguards are a crucial element of the non-proliferation commitments made under the Treaty on the Non-Proliferation of Nuclear Weapons. They are, however, also an essential element of a world without nuclear weapons and the conservation of nuclear energy exclusively for peaceful uses. Thus, they help to implement the object and purpose of the Treaty in multiple ways.

2. Shortly after the entry into force of the Non-Proliferation Treaty, the Board of Governors of the International Atomic Energy Agency (IAEA) set up a special committee to draw up the safeguards to be applied in the non-nuclear-weapon States that would join the Treaty. Document INFCIRC/153 (Corrected) is a model agreement that sets out the technical elements that comprehensive safeguards agreements need to contain. A comprehensive safeguards agreement allows IAEA to give credible assurance that no declared material is being diverted for use in nuclear weapons or nuclear explosive devices. The five nuclear-weapon States parties to the Treaty have concluded voluntary offer safeguards agreements under which IAEA applies safeguards to nuclear material in facilities that the States have voluntarily offered and IAEA has selected for the application of safeguards. Safeguards are also implemented in three States that are not parties to the Treaty, India, Israel and Pakistan, on the basis of item-specific agreements that they have concluded with IAEA.

3. In order to provide the Agency with additional tools to verify the absence of undeclared nuclear material and activities in a State, the Model Additional Protocol (INFCIRC/540 (Corrected)) to the three types of safeguards agreements was approved by the IAEA Board of Governors in 1997. The Model Additional Protocol was designed for all States that have concluded any of the three types of safeguards agreements with IAEA. States with comprehensive safeguards agreements that decide to conclude and bring into force additional protocols must accept all provisions of the Model Additional Protocol. States with voluntary offer or item-specific agreements

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may accept and implement those measures of the Model Additional Protocol that they are prepared to accept.

4. The 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons emphasized in its action plan the importance of additional protocols (see actions 28–30). In action 28, the Conference encouraged all States parties that had not yet done so to conclude and to bring into force additional protocols as soon as possible and to implement them provisionally pending their entry into force.

5. Currently, 148 of 191 States parties have signed an additional protocol with the Agency. Of those, 16 States parties still need to ratify their additional protocols. An additional protocol for the European Atomic Energy Community was also signed and ratified.

6. The Non-Proliferation and Disarmament Initiative supports the universal application of additional protocols. The protocol is necessary to ensure not only the non-diversion of declared nuclear material in a State but also the absence of undeclared nuclear material and activities in a State. It is important to make the effectiveness of IAEA safeguards certain through the maintenance of additional protocols by all States parties to the Treaty. This will give IAEA strengthened tools to verify both the correctness and the completeness of State reports.

Safeguards standards under article III, paragraph 1, of the Non-Proliferation Treaty

7. The drafters of the Treaty were clear on the purpose of nuclear safeguards: to prevent the diversion of nuclear material from peaceful uses to nuclear weapons or other nuclear explosive devices. Safeguards should therefore be applied to all nuclear material in a State, whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility, in all peaceful nuclear activities within the territory of such State, under its jurisdiction or carried out under its control anywhere.

8. The drafters of the safeguards provision in the Treaty considered that any safeguards system based on article III, paragraph 1, would have to be dynamic. The relevant discussions in Geneva and New York reflect an awareness that any safeguards system may have to be revised at some point in order to remain effective. This awareness, in turn, is reflected in the preamble to the Treaty, in which support is expressed for research, development and other efforts to further the application, within the framework of the IAEA safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points.

9. The view that safeguards must be adapted and developed in order to remain effective has been confirmed in the consensus outcome documents of Treaty Review Conferences:

(a) The 1975 Review Conference recommended that more attention and fuller support be given to the improvement of safeguards techniques, instrumentation, data-handling and implementation in order, among other things, to ensure optimum cost-effectiveness;

(b) In 1985, the Review Conference emphasized the importance of continued improvements in the effectiveness and efficiency of IAEA safeguards, for example, but not limited to, the expeditious implementation of new instruments and techniques, the further development of methods for evaluation of safeguards effectiveness in combination with safeguards information and continued increases in the efficiency of the use of human and financial resources and of equipment;

(c) In both 2000 and 2010, the Review Conference, in connection to article III, paragraph 1, recommended that IAEA safeguards should be assessed and evaluated regularly. Decisions adopted by the IAEA Board of Governors aimed at further strengthening the effectiveness and improving the efficiency of IAEA safeguards should be supported and implemented. The 2000 Review Conference noted the measures endorsed by the IAEA Board of Governors in June 1995 for strengthening and making more efficient the safeguards system, and noted also that those measures were being implemented pursuant to the existing legal authority conferred upon IAEA by comprehensive safeguards agreements;

(d) The 2000 Review Conference, in the Final Document, explicitly referred to the Model Additional Protocol, fully endorsing the measures contained therein. It noted that the implementation of the measures specified in the Model Additional Protocol would provide, in an effective and efficient manner, increased confidence about the absence of undeclared nuclear material and activities in a State as a whole. With regard to INFCIRC/153 (Corrected), however, the Conference noted that it only provided a limited level of assurance regarding the absence of undeclared nuclear material and activities in a State;

The States parties to the Treaty then recommended, in 2000, that measures to strengthen the effectiveness and improve the efficiency of the safeguards system with a view to providing credible assurance of the non-diversion of nuclear material from declared activities and of the absence of undeclared nuclear material and activities must be implemented by all States parties to the Non-Proliferation Treaty, including the nuclear-weapon States. We believe that this recommendation, in combination with the Conference's other observations, refers to additional protocols;

(e) Actions 28 to 30 of the action plan of the 2010 Review Conference, adopted by consensus, further reinforce the importance of additional protocols for the implementation of article III of the Treaty;

(f) Action 30 of the 2010 action plan deals in particular with the application of safeguards in nuclear-weapon States. The Conference called for the wider application of safeguards to peaceful nuclear facilities in the nuclear-weapon States, under the relevant voluntary offer safeguards agreements, in the most economic and practical way possible, taking into account the availability of IAEA resources, and stressed that comprehensive safeguards and additional protocols should be universally applied once the complete elimination of nuclear weapons has been achieved.

Conclusions

10. Safeguards standards under article III should evolve when necessary in order for them to remain an effective tool for the prevention of the diversion of nuclear material from peaceful uses to nuclear weapons or other nuclear explosive devices. This has been confirmed by States parties to the Treaty at various review conferences and is reflected in the negotiating history of the Treaty. States parties have identified IAEA as the agency that is responsible for such development.

11. At the same time, the Non-Proliferation and Disarmament Initiative considers that review conference documents reflect an understanding that only a comprehensive safeguards agreement with an additional protocol represents a safeguards standard that is adequate for achieving the purpose of nuclear safeguards under article III. The Initiative therefore considers that a comprehensive safeguards agreement with an additional protocol constitutes the current safeguards standard under article III of the Treaty.

12. The Non-Proliferation and Disarmament Initiative welcomes the entry into force of comprehensive safeguards agreements and additional protocols, as well as the development of State-level approaches to the implementation of nuclear safeguards. The Initiative calls upon all States that have not done so to conclude and bring into force both an additional protocol and a comprehensive safeguards agreement. In general, the Initiative recommends that IAEA safeguards should be assessed and evaluated regularly. Decisions adopted by the IAEA Board of Governors aimed at further strengthening the effectiveness and improving the efficiency of IAEA safeguards should be supported and implemented.

13. States parties to the Treaty should discuss ways in which they can support IAEA efforts to increase the number of additional protocols in force, for example, through outreach and by providing assistance or engaging in capacity-building activities where possible. States parties should consider how regional structures and organizations can play a role in this regard.

14. The Non-Proliferation and Disarmament Initiative considers that the application of nuclear safeguards in nuclear-weapon States contributes to the nuclear disarmament process by reflecting the principles of verifiability, irreversibility and transparency. The Initiative recommends that nuclear-weapon States review their voluntary offer agreements with IAEA and strengthen them, for example, by increasing their scope or removing existing caveats.